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DUPLICATE

FIRST ANNUAL REPORT
OF THE
BOARD OF HEALTH,
OF THE
CITY OF BOSTON.

1873.

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CITY OF BOSTON.



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MEMBERS OF THE BOARD OF HEALTH.

ALONZO W. BOARDMAN, (CHAIRMAN.)

SAMUEL H. DURGIN, M. D.

ALBERT T. WHITING.

CHAS. E. DAVIS, JR., CLERK.

GEORGE W. FORRISTALL, SUPT. OF HEALTH.

SAMUEL A. GREEN, CITY PHYSICIAN.

C. IRVING FISHER, PORT PHYSICIAN.

*Arch.
N. Y. Acad. of Medicine
8.10.31*

CITY OF BOSTON.

TO HIS HONOR THE MAYOR AND THE CITY COUNCIL OF
BOSTON : —

The ordinance relating to the public health, passed Dec. 2, 1872, provides that the "Board of Health shall annually, in the month of May or June, present to the City Council, a report made up to and including the thirtieth day of the preceding April, containing a full and comprehensive statement of the acts of the Board during the year, and a review of the sanitary condition of the city; and they shall at the same time transmit to the City Council, reports from the Superintendent of Health, City Physician, and the Port Physician, covering the same period."

In obedience thereto, we present the following report : —

We first met together Wednesday, January 15th of the present year, organized by the choice of a chairman and clerk, and were then sworn to the faithful and impartial discharge of our duties.

SMALL-POX.

At this time, small-pox was in many places in the city, and we soon came to the conclusion that additional hospital accommodations were at once needed. There was no alternative for us but to take the old Roxbury Almshouse, on Marcella street, for a hospital, and we did so; it was soon fitted up, and small-pox patients were in it that day. It has been used and occupied as a hospital ever since, and up to

the 15th of April was under the management of Dr. M. E. Webb, of this city, when, upon his resignation, it was put under the charge of our city physician.

A supply of what was needed was immediately furnished, and everything that was necessary to be done for the comfort of the patients, so far and as soon as we could learn what was necessary, was done. Two more ambulances were needed, and made to convey the patients to the hospitals.

To avoid, as far as possible, unpleasant association, and to preserve in all its integrity the market value of real and personal property, as it stood in the city early in January last, and to steer clear of all acts of needless disenchantment, we designated each hospital by a number, rather than by the street on which it stood; that already in use being called Hospital No. 1; that just entered, No. 2; but Gallop's Island had already got past the medicine of numbers, and we did not attempt to christen it anew.

As nearly as we can estimate, the number of cases of small-pox in our city, on January 15th last, was 650. Of this number there were at Gallop's Island, 61; and at Hospital No. 1, 56; the hospital having been built but a few days, and that number having been removed there during this time. The remainder were at their several homes in the city, and consisted of those cases which were reported when there were no hospital accommodations, and of others who could not legally be removed. It gives us satisfaction to be able to state that in only a few instances has an order for a forcible removal been given; and that in the larger portion of these the order was not needed after it was issued, the parties in almost every instance manifesting a willingness to go, before the ambulance arrived to take them. Besides this, very few, if any, have left the hospital after recovery, without expressing a thankfulness to Drs. Webb or Green that they were taken there, and in many instances has the

patient been so pleased with his treatment there, that he has expressed a wish to stay longer than was necessary.

The number of patients Feb. 11, was as follows : —

At Gallop's, 24 ; at No. 1, 66 ; at No. 2, 75.

March 2. — At Gallop's, 10 ; at No. 1, 25 ; at No. 2, 52.

March 14. — At Gallop's, 0 ; at No. 1, 11 ; at No. 2, 33 ; and 6 cases only in the city, outside the hospitals.

April 30. — At Gallop's, 0 ; at No. 1, 0 ; at No. 2, 12 ; and of these only 2 were sick abed.

The number of patients admitted at Gallop's, —
From Sept. 1, 1872, to April 30, 1873, was 473.
From Jan. 15, 1873, to April 30, 1873, was 17.

Number admitted in all, —

		Died.	Vaccinated.	Vaccin'd & Died.
At Hospital No. 1,	233	48	174	33
At Hospital No. 2,	291	60	246	45

But of this last number (291) 11 were transferred from No. 1.

The number of deaths from small-pox in the entire city,					
for the week ending January 18, was					46
"	"	"	"	" 25, "	35
"	"	"	"	Feb. 1, "	42
"	"	"	"	" 8, "	24
"	"	"	"	" 15, "	17
"	"	"	"	" 22, "	8
"	"	"	"	March 1, "	11
"	"	"	"	" 8, "	5
"	"	"	"	" 15, "	4
"	"	"	"	" 22, "	6
"	"	"	"	" 29, "	4

For the week ending April	5, was	.	.	.	2
" " " " "	12, "	.	.	.	2
" " " " "	19, "	.	.	.	2
" " " " "	26, "	.	.	.	3
" " " " May	3, "	.	.	.	2
" " " " "	10, "	.	.	.	0

Immediately upon the recovery of a patient, or his removal to a hospital, or for burial, his house has, in every instance within our knowledge, been thoroughly fumigated, and all infected material as thoroughly disinfected as possible.

We found it necessary to run a telegraph from some central point, near City Hall, to both hospitals. One was constructed accordingly from Police Station 2, in Court square. This was particularly necessary when an ambulance was needed, as the vicinity of City Hall, or any other place much frequented, was no place to keep an ambulance in waiting.

Whenever a case appeared which could not be moved without danger to the health of the patient, or could not be legally moved, we have taken due care that the existence of the case and its exact locality should be known to all likely to pass that way, or liable to be in any way affected by it. A flag has been placed at the door, or a card on the door with the word "Small-pox" on it. The people have, so far as we know, with two or three exceptions only, willingly allowed this to be done till all danger had passed, when it was removed. Two or three flags only, to our knowledge, were wantonly removed, and we immediately applied to the Legislature to prohibit the removal of such card or flag, and to add a wholesome penalty for such removal. They did so promptly, as will be seen by consulting Ch. 2, of the Acts of 1873.

It became indispensable at the outset to have men in our service who had had small-pox, to enter and examine sus-

pected places, to aid in removing the sick to the hospitals, and finally to guard Nos. 1 and 2. Accordingly, on the 18th of January, we appointed one chief health officer for general duty, and before the month was out, ten others, and one more in February. And as soon as we could with safety dispense with the services of any one of these, we did so, having in our employ on the 30th of April but seven of the original number. It was deemed of great importance that Hospitals 1 and 2 should both be guarded outside night and day, and the larger portion of these health officers have been engaged in doing this guard duty.

On the 20th of January we published in the press of the city an appeal to the people, not to magnify a new office nor to alarm any one, but simply that the evil that was upon us might be more fully comprehended; that it might be better prepared for and guarded against; that we might get the active aid and encouragement of all in trying to stop the spread of the epidemic; that all might be induced to obey the laws; and last but not least, that some sympathy might be awakened in behalf of poor unfortunates who were suffering so much and dying so fast. We should have been well satisfied with the result of that appeal had it no other effect than to bring such abundant contributions of choice flowers and little luxuries for the sick at the hospitals as came to us almost every day afterwards. But it did a great deal more. And in this connection we must speak of the regret we feel that we cannot with propriety disclose the names of such true Christian philanthropists. But they are not forgotten; we know them all.

During our first week small-pox seemed so prevalent that we feared we should need another hospital. We soon made selection of a spot, and took some steps towards putting it in condition for building a hospital. Competent architects were employed, who submitted plans from time to time, each new plan being for a smaller hospital, till, finally, the disease

abated so, that what seemed at first an absolute necessity, we afterwards found we should have no occasion for, and on the 5th of February we abandoned the project altogether.

In obedience to the statute requiring the Board to make such regulations as it judges necessary for the public health and safety, etc., the following were made and published, as required by law :—

" RULES AND REGULATIONS OF THE BOARD OF HEALTH.

" BOSTON, February 1, 1873.

" At a meeting of the Board of Health, held this day, the following regulations of the course to be taken by the public to diminish the spread of small-pox were adopted and ordered to be printed for general distribution :—

" Vaccination and re-vaccination, and thorough isolation of those sick with small-pox, or varioloid, are the principal and most important means to be adopted to diminish the spread of this loathsome disease. Every small-pox patient should be immediately separated from all other persons liable to contract or communicate the disease, and be strictly secluded at home or in hospital during the whole progress of the disease, as well as during convalescence from it, and until all power of infecting others is passed.

" None but nurses, and the attending physicians, will be allowed access to persons sick with small-pox, and no patient be allowed to leave the premises until he, together with the bedding and clothing, has been disinfected, and permission given by some person authorized by the Board of Health.

" When patients are treated at home they should be placed in one of the upper rooms of the house, the farthest removed from the rest of the family, where the best ventilation and isolation can be had. Keep the room well aired ; remove all carpets and woollen goods and all unnecessary furniture.

Change the clothing of the patient as often as needful, but do not carry it while dry through the house, but first place it at the bedside in a bucket of scalding water, adding two ounces of solution carbolic acid, before removal from the room.

"All infected clothing, bedding and other articles used by the patient which can, without injury, should be washed in boiling water.

"All infected clothing, etc., which cannot be wet without injury, must be disinfected by baking or fumigation. The latter may be accomplished as follows: Separate the clothing and hang it about the walls of the room and upon the furniture; shut the room closely; put two pounds of sulphur in an iron dish, ignite, and leave it in the closed room for two hours. No person can remain in the room while this process is going on. The room should then be well aired.

"For those who cannot be properly isolated and treated at home, ample and comfortable hospital accommodations have been provided where patients will be taken, and the best nursing, care, and medical attendance supplied gratuitously to the poor, and upon the most reasonable terms to those who can afford to pay.

PORT PHYSICIAN.

On the twenty-first of January, the resignation of Dr. Durgin as Port Physician was tendered and accepted, and the name of Dr. C. Irving Fisher was submitted to the Mayor for his approval; it was approved, and Dr. Fisher was appointed. We submit herewith also his report. And on the seventh of April we concurred in the appointment of Dr. Thomas Kittredge as Assistant Port Physician.

On the seventh of March we issued the following quarantine regulation, and published it according to law:—

IN BOARD OF HEALTH,
Boston, March 7th, 1873..

Ordered, That all vessels arriving at this port, which have on board at the time of their arrival, or have had during their passage to this port, any sickness of a contagious or doubtful character, which may be detrimental to the public health, shall be anchored at quarantine. No such vessel shall proceed, nor shall her cargo, or any part thereof, be discharged, nor any person be allowed to go on board or leave her while in quarantine, without the written permit of the Port Physician. And the Port Physician is hereby authorized and instructed to take such measures with regard to such vessels as, in his judgment, the health of the city may require.

CHARLES E. DAVIS, JR., *Clerk*.

On the fourteenth of March, we issued the following quarantine order, and revoked it on the first of May, not, however, without having many times carefully weighed the couplet: —

“What boots it at one gate to make defence,
And at another to let in the foe?”

The other gates being by this time so open, it was deemed unfair to place any longer an obstruction at this one: —

OFFICE OF THE BOARD OF HEALTH,
BOSTON, March 14, 1873.

Ordered, That all immigrants arriving at this port in vessels from foreign ports be detained thereon until an inspection of such immigrants has been made by the City Physician, with a view to the necessity of their vaccination. And the City Physician is hereby instructed to cause such immigrants who may not, in his judgment, be already protected against small-pox, to be vaccinated before leaving the vessel.

CHARLES E. DAVIS, JR., *Clerk*.

STATE CHARGES.

Sec. 16, Chap. 26, of the General Statutes, reads as follows:—

“When any person coming from abroad or residing in any town in this State is infected, or lately has been infected, with the plague or other sickness dangerous to the public health, except as is otherwise provided in this chapter, the Board shall make effectual provision in the manner which it judges best for the safety of the inhabitants, by removing such person to a separate house or otherwise, and by providing nurses and other assistants and necessities, which shall be at the charge of the person himself, his parents, or master, if able, otherwise at the charge of the town to which he belongs; and if he is not an inhabitant of any town, at the charge of the Commonwealth.”

But Sec. 51 of the same chapter, says that the provisions of this and other sections shall not apply to small-pox. Chapter 189 of the Acts of 1872, amends this Sec. 51, by adding thereto the following words: “So far as they confer authority for the removal of patients from their homes, except in case of persons residing in boarding-houses, hotels, or where two or more families occupy the same dwelling, and in all other cases where, in the opinion of the Board of Health and the attending physician, the case cannot be properly isolated.”

Putting the two sections and the new act together, and applying the maxim, “*expressio unius, exclusio alterius*,” the result is that a small-pox patient, admitted to one of our hospitals, who is not an inhabitant of any town, and who is unable to pay, becomes a State charge.

Acting upon this, we have made out the bills of all those who were State charges, so far as we were able to ascertain them (for putting the necessary questions to find this out, to a poor victim just arriving at the hospital, was not consid-

ered the best medicine for him), and these bills have all been sent to the Secretary of the Board of State Charities, for all patients up to and including the thirtieth of April, 1873. They amount to upwards of \$100,000, and this amount is now due the city, from the Commonwealth, under the law.

On the fourteenth of March, for various reasons, we concluded to vacate No. 1, on the following day, and we did so ; first satisfying ourselves that the removal could be made without danger. There were but eleven patients then remaining there, and their removal was made to No. 2, with beneficial results, without any evil consequence whatever, and with but very little noise. But we have ever since kept a guard day and night around No. 1.

At this time there was no small-pox at Gallop's, and only four sick people there. On the twenty-sixth of March, all the beds, bedding, and furniture of No. 1, after thorough fumigation and disinfecting, were also transferred to No. 2.

MEDICAL INSPECTORS.

A number of medical gentlemen had been authorized to vaccinate throughout the city prior to the time of our entering upon our duties, and were then vaccinating. Of these, as many as applied to us for that purpose were authorized to continue until some plan could be matured, or definite arrangement made. Finally, on the twenty-fifth of January, one medical inspector was appointed for each ward, — appointment to take effect on the twenty-seventh, — with power to each to appoint two assistants, and in some wards three, all to be approved by us. But we held the chief medical inspectors responsible for their assistants. The latter were continued in office until the twenty-second of February ; the former until the fifteenth of March. Families were visited, and in a number of wards the ward-rooms were opened for vaccination.

The figures may be unimportant, but we append them :—

Whole number vaccinated, ...	14,977
“ reviewed, ...	10,546
Average percentage of success so far as reviewed, ...	.55

On the seventh of April, we appointed, subject to the approval of the Mayor, Dr. Samuel A. Green, City Physician, whose report is submitted herewith, George W. Forristall, Superintendent of Health, and Dr. C. Irving Fisher, Port Physician, and these appointments were approved. We also appointed George T. Ranlett, captain of the steamer “Samuel Little” (Capt. Cates having resigned), and William H. Preston, engineer.

PHYSICIANS, ETC.

The law provides that when a physician knows that any person whom he is called to visit has small-pox, etc., he shall immediately give notice thereof to the Board of Health. Not a week had elapsed before we felt it our duty to enter a complaint under this law. The concealed case is more to be dreaded than many whose whereabouts is known. One physician was arrested for not reporting a case of small-pox which he had been treating. He was tried, and his defence was that he was not a physician, — a point there is no occasion for disputing in this report; but he was found guilty, inasmuch as he had at various times, and in various ways, held himself out as such, visited and prescribed for the sick, and taken fees. He appealed, and his case is still in court.

TENEMENT HOUSES.

In 1872, the number of tenement houses in the city was 2,165, containing 54,450 people. Although one ward in New York contains nearly double this number of tenement population, yet the fact, alone, that nearly one-fifth of the population of our city dwells in tenement houses, makes the sub-

ject, and their proper construction and care, one of great concern to all. We began to turn our attention to it, and to nuisances of every description, in the latter part of February, the small-pox having abated somewhat at that time, so that we could do so without neglecting the sick, although the deep snows of winter charitably hid a multitude of violations of law and ordinance, and made almost unobjectionable innumerable nuisances, they were so perfectly concealed. But upon the dissolving of the winter's snows these nuisances broke from their hiding places all over the city.

Chief among the essentials to a perfect tenement house system are the genial sunlight and pure air; and both of these involve the necessity of space. Density of population and overcrowding are stern foes, not only to good morals, but to any civilized system of living. It can easily enough be shown that houses ill-ventilated and filthy are economical, in the market sense, for the tenants, because much less food is needed in them, and the body is very soon destroyed; and not the body only, but the soul. And as cleanliness is somehow always associated in men's minds with godliness, and always in such a manner that we can only reach the height of the latter through the former, we cannot but ask ourselves, if this is so, what chance has godliness in some of our tenement houses in this city? We should understand, then, that before godliness can be obtained, we must be made clean, and missionary labor to a poor sick man, gasping for air, should begin by giving him pure air at the start; and religious consolation when, afterwards, he is able to bear it. Yet people, young and old, die in multitudes in our tenement houses, and deaths there as elsewhere are attributed to the mysterious dispensations of Providence, when there is no mystery about it. The deaths are all logically due when they happen, and the mystery would be if they happened not. It is only certain effect following obvious cause. If the owners of some tenement houses could be quickened into a

sense of moral obligation, the duty they owe to their Maker, to society, to themselves, or that first lesson of political economy, that the better tenement houses are built, no matter what class of house, the better in the long run for the owners' pockets; or that other lesson, that sickness is oftener than anything else the cause of non-payment of rent, and their miserably built, badly ventilated shells and surroundings, the cause of the sickness, — these things would not be in our city, our yearly mortality would decrease at least one-fifth, as clearly shown by Mr. Leeds, in his comments on the death-rate in New York, rarely would a sickness "native and to the manner born" start up, and no foreign plague, pestilence, cholera, or contagion of any description would ever find foothold here if it came. If the death-rates and statistics of mortality in great cities should be carefully studied, and its causes could be accurately seen, there would be no doubt but that one-fourth of those who die, die from causes connected in some way with impure air. Is this one-fourth, then, worth saving? If so, let us have pure air. There is enough of it, — more bountiful than the sea, — and it is as essential to life and health as food; and why men will shut themselves up and inhale rank poison, all their lives, when they can have pure air for the asking, is more than we know. We pet and train and teach birds, dogs and horses and the like, and let little children, who might be made of great worth, even in the lowest market sense, grope their way in the dark and into the ground early, as if they were of no consequence; when a few choice grains of knowledge of the laws of health would save them. Two thousand years ago this was not so.

The Legislature of 1871 gave us a tenement-house law much in advance of the old system. There are excellent requirements in it, which, if rigidly enforced, will and must conduce greatly to the public health. And we have taken the best care we could that this law should be understood,

and complied with. It makes excellent provision for the proper ventilation of tenement houses, and for proper and sufficient rooms for sleep. When we consider that, of the threescore and ten years of life, we pass almost twenty-five in sleeping-chambers ; that the first requisite of life and health is pure air ; that, according to the English apportionment for hospitals, the cubic space for each bed with one occupant is 2,100 feet, and that in consequence of the impurity of the air once breathed, 4,000 cubic feet an hour are required, — we can but stand aghast at the scanty breathing-places, the wretched Calcutta black-holes called sleeping-chambers, which we find in many of our tenement houses.

A well-known writer says, "There are strong reasons for believing that every year there are more cases of dangerous and fatal diseases gradually engendered by the habit of sleeping in small, unventilated rooms, and by crowding persons in the same bed and room, than have occurred from cholera atmosphere during any year since its first appearance in this country." From the same authority we learn that England, out of a total force of 93,959 men engaged in the campaign in the Crimea, lost 33,645 ; of whom only 2,058 were killed in action, and 1,761 died of wounds. To every one taken to the hospital on account of wounds, *twelve* were taken there on account of disease. The chief disease was typhus fever. And Boudens, surgeon-in-chief of the French army, says of this disease : "It is engendered by crowding and want, either in hospitals, prisons, or on board vessels. The disease may indeed be called forth and removed at will. And," he adds, "The first remedy is pure air and powerful ventilation." Our writer further says, "The sickness was stayed and finally disappeared ; and the great panacea was pure air."

Nor are those who are fortunate enough to dwell in other than tenement houses exempt from the common want of pure air ; and we should be much more exempt than now from needless disease and death, if men everywhere would only

carry into daily practice those natural laws which it is every man's imperative duty to know. Those who should know better pass many consecutive hours in close rooms, breathing over and over their own poisoned breath without a change of air. Sickness follows and the poisoned mortals can't see the point. What should follow? The law violated, the penalty must eventually come. Every breath we draw is drawn for a purpose,—to take into the lungs all its excellence, and the exhalation is mere poison if taken in again. Houses densely inhabited, then, and ill-ventilated, whether tenement or otherwise, become at some time filled with this poison, and they need open doors, open windows, and open fireplaces, or some proper system of thorough ventilation to let the poison out and the pure air in, or sickness and disease must follow.

If people could only see the air they breathe as they do the water they drink, there would be no trouble. But they do not, and in the long run it tells its own inevitable, retributive story. "The prudent man foreseeth the evil, and hideth himself, but the simple pass on and are punished."

Our public buildings, halls and school-houses are many of them built with no view to or thought of proper ventilation. The writer just quoted says that Judge Pierpont resigned his seat on the bench in New York in 1860, because the court-room was "ruinous to health and dangerous to life," and that Chief Justice Robertson of that city died of pneumonia from exposure for eight hours to the bad atmosphere of a court-room. Let some person who never has thought of it go into some of our school-rooms, even in our own city, on a moist winter day, about twelve at noon, where some 60 to 100 pupils are climbing the wearisome heights, and the darkest troglodytic dormitories of our city have something of the scent of an orange grove in full blossom in comparison. You ask about the ventilation, and your eye is directed to two or three holes in the wall near the ceiling, but you are not told whether moral suasion is to coax, or corporal pun-

ishment drive, the deadly poison up there, nor who or what does the coaxing or driving. But you must be persuaded to believe that a mastodon crawls out of a gimlet-hole when no inducement is offered him to go.

From the incomplete returns we have been able to gather up to the date of this writing, we are unable to give the average number of families in our tenement houses, but in 1869 there were 120 distinct families under one roof in New York, and there were in that city 13,623 houses, which averaged nearly six families each. In Philadelphia there was one house to every six persons; in New York, one to every thirteen; and there were three times the number of deaths in proportion to the population where they are huddled together, compared with the mortality where every family lives in a dwelling of its own. Dr. Mapother says, "Consumption and allied diseases slay about 100,000 yearly in England, Ireland and Scotland. And these deaths are distributed in almost exact proportion to the density of the population." Again, of Dublin he says, "Over-crowding, impure air, insufficient water, imperfect sewerage, debility, pauperism, contagious scourges, death, widowhood, orphanage and high taxation have been in this city sequential terms." But who can wonder at the death-rate in such places, when, as a fair illustration, Corfield tells us in his book on sewage that a woman in Rugby, England, living near some great nuisance, said her rent was low (1s. 9d. a week), *on account of the nuisance.*

A large number of people, upon being requested to call at our office, have done so, and upon our showing them wherein they were living in violation of law and the city ordinance, they have promptly remedied everything and complied with the law. Yet there are those who have done so reluctantly, and some who would not do it at all until they acquired a more perfect knowledge of the law and the ordinances than

we could give them, — the knowledge derived from experience.

During the entire month of March, we gave what attention we could to tenement houses and nuisances, aided during the first half of the month by some of the medical inspectors, but this we did without any regularly established system, not coming at any conclusion as to the simplest and at the same time the most efficient method of conducting the business; but on the twenty-ninth of March we appointed sanitary inspectors, who commenced work on April 1st.

The number of tenement houses so inspected and entered upon our records, not including those visited by the members of the Board, to the thirtieth of April, is 620. Those were occupied by 3,643 families, comprising 14,426 people. Up to that date many notices, whose number it is a waste of time to count, had been sent to parties who had failed to comply with the law regulating tenement houses, and a large number also to persons who suffered nuisances to exist upon their premises in violation of either law or ordinance, or both. In addition to these, there have been some few prosecutions.

We cannot leave this subject without earnestly recommending that the yards, alleys and courts connected with them be required to be paved, as in many instances in New York and Philadelphia, thereby avoiding many causes of foul air and various nuisances that now lie concealed.

INSPECTION OF PROVISIONS, ETC.

A law of 1872 provides for the appointment of inspectors of provisions, whose duty it is to inspect meats, fish, etc. If, on such inspection, a calf is found under four weeks old, the inspector must seize it and cause it to be destroyed; but the owner may appeal to the Board of Health, whose duty then is to inspect it also, and order it to be destroyed,

or disposed of otherwise than for food if they find it unwholesome.

On the eighth of April, we were called upon to inspect the veal of twenty-four calves. We did so, and condemned them, and have had no invitation to inspect any since. The argument in favor of selling such veal is, that it costs less than other meat, and there are many poor people, who must have meat, who cannot afford to buy any other. It will be seen that the argument proceeds upon the same reasoning as the low rent of the widow at Rugby, and on its face seems the very incarnation of humanitarianism. But its fallacy consists in calling creatures of such tender days, meat at all. Still, of the two, we consider the argument better than the veal.

URINALS.

The public urinals in the city are only fifteen in number, and are as follows : —

- 1 on Blackstone street.
- 1 on Hatter's square.
- 3 about the Quincy Market.
- 1 on Chatham street.
- 1 near the corner of State and Commercial streets.
- 1 on Doane street.
- 1 on Liberty square.
- 1 in Province House court.
- 2 at the Court House.
- 1 on the Common.
- 1 at the Boylston Market.
- 1 at the Green House on the Public Garden.

A communication was forwarded by this Board on the thirty-first of March last, setting forth the importance, in our judgment, of a greater number than we now have, at convenient places throughout the city.

FOWLS, ETC.

A hen is not a matter of large concern in a great city, nor is a pig; yet they are both important in the domestic economy; they give great comfort to poor people, and are both subjects of municipal regulation. No one, by the ordinance, is allowed to keep fowls, swine, or goats, without a license from this Board; and while we have *in totidem verbis* licensed none, we have interfered with no one, unless a well-grounded complaint came from those who were disturbed by it. Many things in themselves apparently evil are the cause of much good. And whenever we "from seeming evil still educing good," could contribute to the comfort of people in this respect by letting them alone, we have done so.

ANOTHER HOSPITAL.

It is the opinion of the Board that a small-pox hospital should be built in some favorable spot within the city limits, where it would cause the least annoyance, and at the same time where all the essentials of a hospital could be had. Hospital No. 2 has been an excellent place for the sick, while its occupancy for small-pox patients has been a cause of very great annoyance to some in the immediate neighborhood, and to many quite a distance away, who were not otherwise afflicted. But the truth should be told, that the people of Ward 15 have, on the whole, borne with great patience and magnanimity the infliction of this misfortune in their midst, which could not fall elsewhere; but a more favorable spot can now be found, and land of much less market value.

In conclusion, the ordinance requires of us "a review of the sanitary condition of the city." It is much better, in our judgment, to confess that our limited experience renders us unable to do so now, farther than the facts and sugges-

tions we offer may show it, than to attempt to do so and fail to do it correctly, for want of knowledge. Yet we certainly know that there are serious drawbacks to that perfect health which our favored city ought to enjoy. The soil of New England is proverbially sterile, and our shores in some places dangerous and forbidding. Our climate is shamefully abused by those who study it not, or who, knowing it, as shamefully set at defiance natural laws. An easterly wind is not perhaps the most favorable one for rheumatic complaints, but he who is suffering from these, in abusing the climate, forgets that he has no lawful right to the troubles he suffers from, and therefore no just ground of complaint. He who "tempers the wind to the shorn lamb" sends the east wind in mercy, and it is all well ordered. We have no excuse for being otherwise than well fortified, and, being so, no trouble will come from that quarter. It is easy to attribute pulmonary complaints to the east winds, but the real cause is not in them, but in ourselves. Exercise, temperance, cleanliness, and an abundance of pure, fresh air, sunlight, and good food, — these are the true preventives of disease, in whatever shape; and lack of these is sure to bring its train of ills, let the wind come from what quarter it may. People in every position in life should be more fully awake than they are to their importance. If they were so, and would only give constant heed to these key-notes to health, there would be no such increase in the mortality of the city as there was in 1872. The promptest attention should be paid by all our citizens to stagnant and waste water, defective drainage and sewerage. As to the troublesome question of sewerage, or what to do with our sewage, the problem has not yet been solved. England has tried various systems, but has as yet reached no definite conclusion. Yet the time must come sooner or later, when sewage, properly so called, must be disposed of in some manner independent of and disconnected from the sewers, or something must be added

to our present sewers. Vienna, on an elevated site with the Donau at its base, having three times the rapidity of current of the Hudson or the Rhine, may for years to come send her sewage through that channel to the sea, but Boston cannot always avail herself for this purpose of her sewers, as they now are, or the river Charles. Our sewers must be extended, or some large one take the contents of all those which now fail to go there, into the deep tidal currents of the river or the sea, and the vexed problem may be saved for us for a long time, if not forever.

The effect on the health of the city of filling up the back bay entire, we have yet to wait for. But had 500 feet in width of Commonwealth avenue been left open from Arlington street westward, in conformity to the request of the memorialists in House Document No. 228 of 1860, — in other words, were the constantly changing blue water where the green now is on that avenue, so that the western air could come in to us over another broad water sweep, there can be no doubt that the city would not have suffered in point of health, and she might easily have been made another Hamburg.

And last, but not least, could several inches, perhaps feet, of the putrid bottom of Miller's river be removed beyond smell and sight, not only would the "atmosphere of death" that so often hangs like a pall over the West End, give way to something sweeter, but our people would begin to have some faith in the doctrine that society exists only upon the principle that sometimes private advantage shall be sacrificed to the public good. It hardly seems possible that men can be found so lost to all sense of moral obligation or public duty, so captivated by the music of what Carlyle calls "the all-pervading jingle of dollars," as for private gain to endanger the lives and destroy the comfort and peace of thousands of our people by such a dreadful nuisance as this.

While we have devoted many days to the purification of the city in all parts, trying hard to enter into every little detail of impurity at the North End, and make the unclean clean in the smallest matters, we have more than once thought of how little worth is all this in view of the dreadful odors that come from the nuisances of Miller's river to the people of the West End, and have half thought we heard some inhabitant of that portion of our city say of the Board of Health, in the language of King Richard to Stanley: —

. "What do they in the North,
When they should serve their Sovereign in the West?"

Respectfully submitted.

A. W. BOARDMAN,
Chairman.

REPORT OF THE CITY PHYSICIAN.

CITY PHYSICIAN'S OFFICE, June 17, 1873.

To the Board of Health:—

GENTLEMEN,—I have the honor to submit the following report of this office for the year ending April 30. For the first eight months of this period reports have already been sent to the City Council, and this one will necessarily duplicate those that were presented quarterly during the last half of the year 1872.

The following table will show the number of persons vaccinated and re-vaccinated, the number of certificates given to children for their admission into the public schools, and the number of physicians resident in the city, who have been supplied gratuitously with vaccine virus:—

	Vaccinated.	Re-vac- cinated.	Certificates.	Supplied with virus.	Whole No. recorded.
May and June, 1872	554	0	33	13	600
Quarter ending Sept. 30 . .	420	0	65	67	552
“ “ Dec. 31 . .	1,033	0	39	20	1,092
“ “ Mar. 31, 1873	164	190	19	18	391
April	27	13	19	0	59
Total	2,198	203	175	118	2,694

Until the present year it has not been the duty of the City Physician to re-vaccinate applicants, which fact accounts for the small number under the second heading.

Visits have been made to the jail daily, and 1,150 prisoners been vaccinated at the time of their entrance. The Temporary Home and the City Prison have been visited as often as necessity required. A physical examination of all candidates for the Police has been made on the requisition of the Chief. During the year, 3,367 cases of small-pox have been reported, and 996 deaths have occurred from the same disease.

Very respectfully, your obedient servant,

SAMUEL A. GREEN,
City Physician.

REPORT OF THE PORT PHYSICIAN.

To the Board of Health:—

GENTLEMEN, — In compliance with the Ordinance, the Annual Report of the Port Physician is at this time presented.

Inasmuch as the epidemic of small-pox during the past year gave us a large amount of work, which could not be regarded as strictly quarantine, I have thought it best to arrange the subjects to be noticed in this report under two heads: one a report of quarantine relating to vessels; the other a report relating to the epidemic of small-pox.

I.

QUARANTINE RELATING TO VESSELS.

By order of the Board of Health the quarantine inspection of vessels was observed from June 1st, 1872, to November 1st, 1872, and during the year only two vessels have required an official visit outside of the season specified. These were the steamers "Kedar" and "Batavia," from Liverpool, with small-pox, and which arrived respectively, May 9th, 1872, and April 5th, 1873.

During the year there have been inspected six hundred and seventeen vessels, which may be classified as follows:—

Steamers	48
Ships	57
Barques	190
Brigs	194
Schooners	128
	617

As of interest in showing our commercial relations with ports from which vessels are subject to quarantine inspection, from June 1st to November 1st each year, the following classification is given. The numbers include vessels of every description : —

From United States south of the Capes of Virginia,	116
West Indies and South America	251
England and Scotland	87
Europe, north of, and including France	41
Europe, south of France and the Mediterranean	43
Africa and East Indies	77
Total	615

Of the whole number inspected during the year only seven, or a little more than one per cent., had sickness of a quarantinable character on board, and were detained at the station. Of these, five had small-pox and two ship-fever. In all, ten persons were removed to the hospital; six with small-pox and three with ship-fever. One was not sick, but had been especially exposed to small-pox.

All of the sick recovered.

The length of time the vessels were detained from which the above sick were taken, varied from fifteen hours to three days.

The revenue derived from vessels, in fees amounted to \$3,970.00.

Four of the vessels included in the list were ships of war, and, by courtesy, passed without fee.

The amount collected for board and medical care of patients above mentioned, was \$163.97.

Whole amount collected and passed to the City Treasurer, \$4,133.97.

By order of the Board of Aldermen the custody of Gallop's Island was, on May 1st, 1872, transferred from the

Board of Directors for Public Institutions to the Board of Health. The occupation of the island with small-pox was an obstacle in the way of obtaining the proper amount of help to fully improve its resources. Notwithstanding this, a considerable amount of vegetables was raised, and sufficient hay cut, of good quality, to keep a horse and cow during the year.

The principal improvement made upon the island during the year was the construction of a new wharf and coal-shed ; we do, I believe, fully appreciate the convenience of both.

Allow me here to speak of a very great need upon the island, namely, a new barn. The buildings now used are in a dilapidated condition, and afford neither the shelter nor convenience which are needed. I would recommend for your consideration at an early date the expediency of building a new barn.

Having at present no accommodations except for small-pox patients, and being liable to need other and different accommodations during the summer season, I would also recommend the construction of at least two more hospitals ; one for yellow fever, and the other for ship fever. Should cholera present itself, even a third building, or a ship, or tents would be needed.

There are several buildings upon the island which, in their present dilapidated condition, are unsightly and useless, and ought to be torn down.

For many years the boarding of vessels and transferring of patients to the quarantine hospital was done in an open row boat. There were many times when this method, though possible, was unsafe. At times it was impossible.

The new steamer "Samuel Little," which was built and placed upon the station last season, has fully met a need long felt, and the quarantine work is now done with comparative comfort.

